



STATE OF MARYLAND

# DMMH

Maryland Department of Health and Mental Hygiene  
201 W. Preston Street, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

## Office of Preparedness & Response

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## Public Health & Emergency Preparedness Bulletin: # 2009:52 Reporting for the week ending 01/02/10 (MMWR Week #52)

### CURRENT HOMELAND SECURITY THREAT LEVELS

National: Yellow (ELEVATED) \*The threat level in the airline sector is Orange (HIGH)  
Maryland: Yellow (ELEVATED)

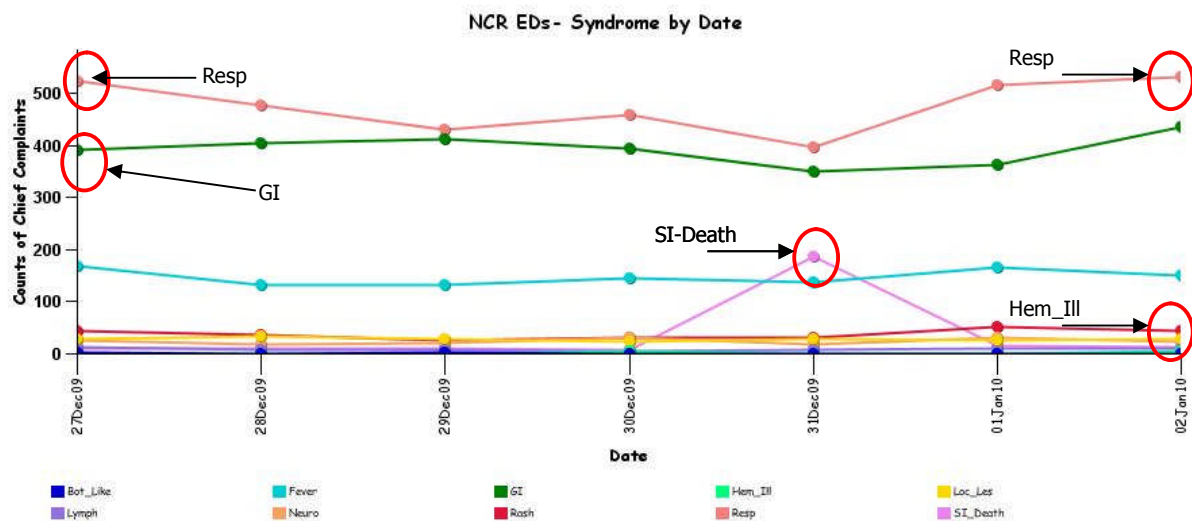
### SYNDROMIC SURVEILLANCE REPORTS

#### ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled.

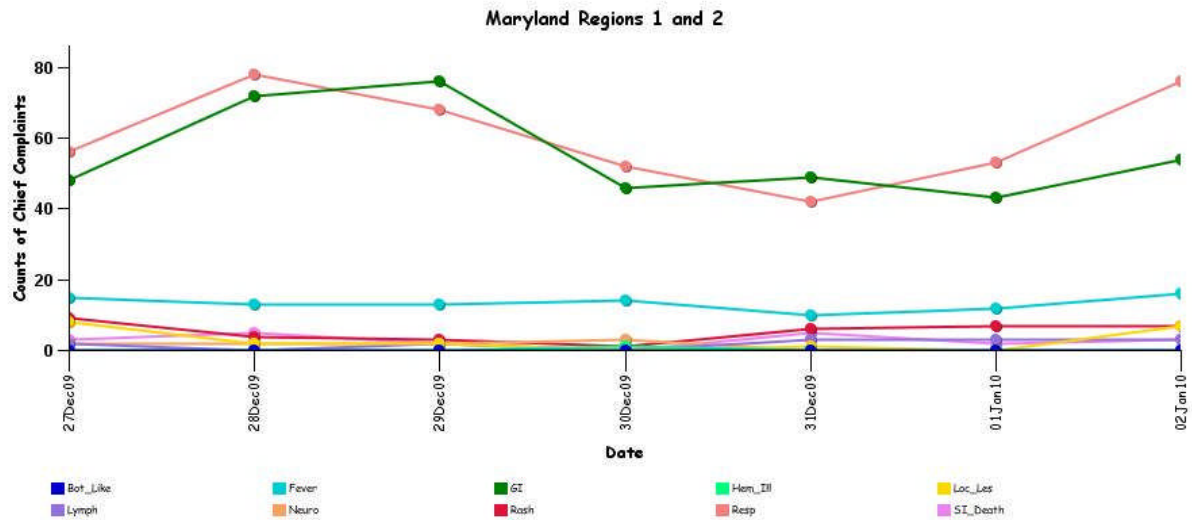
Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

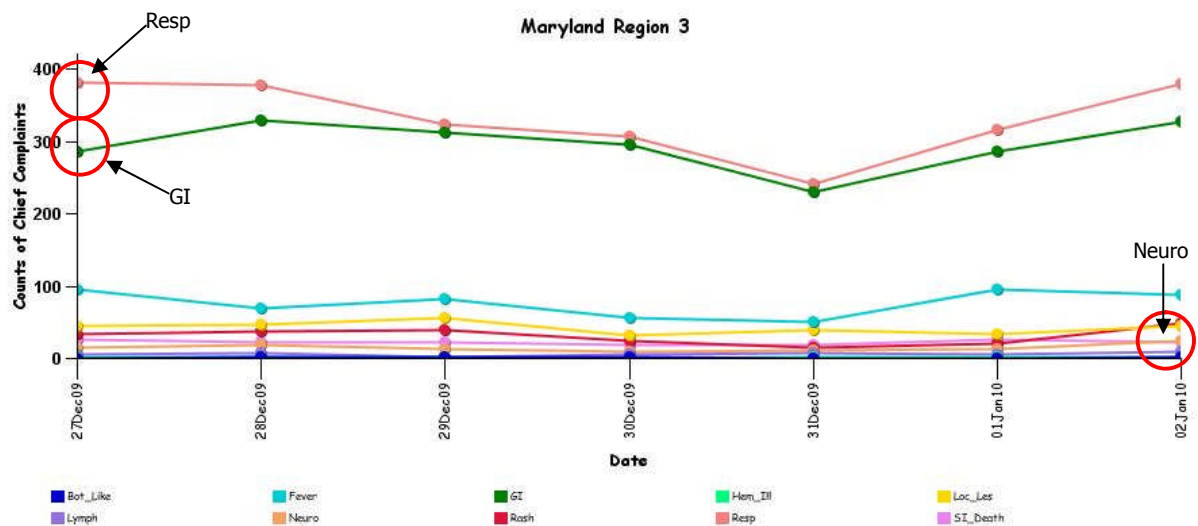


\* Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

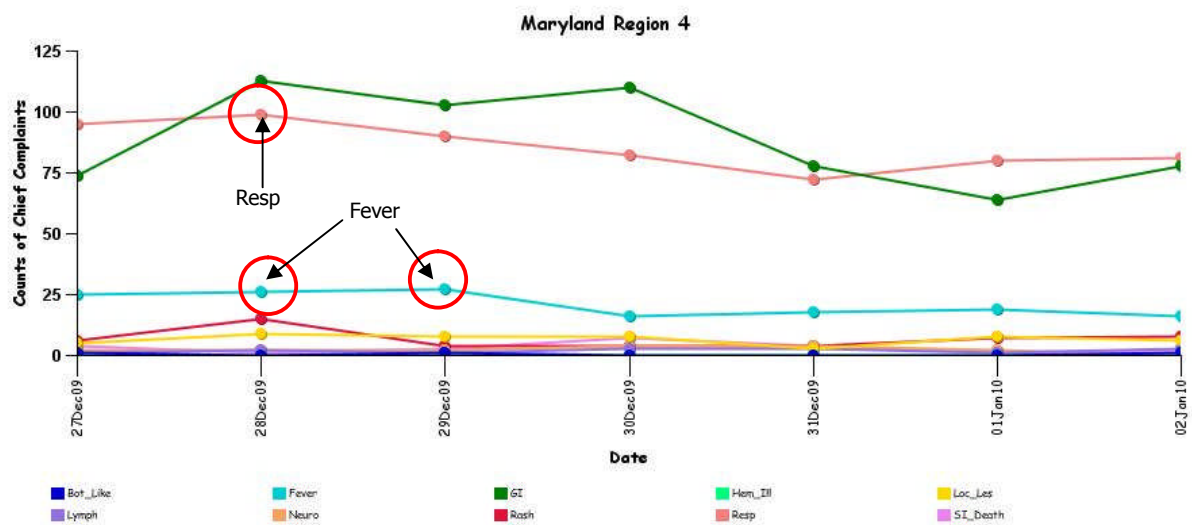
**MARYLAND ESSENCE:**



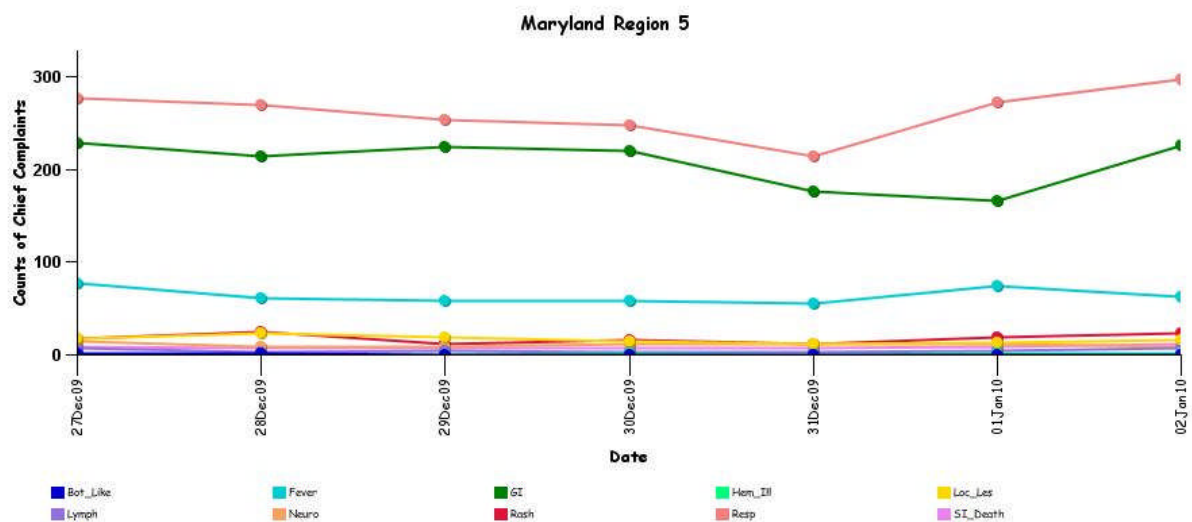
\* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



\* Region 3 includes EDs in Anne Arundel, Baltimore city, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



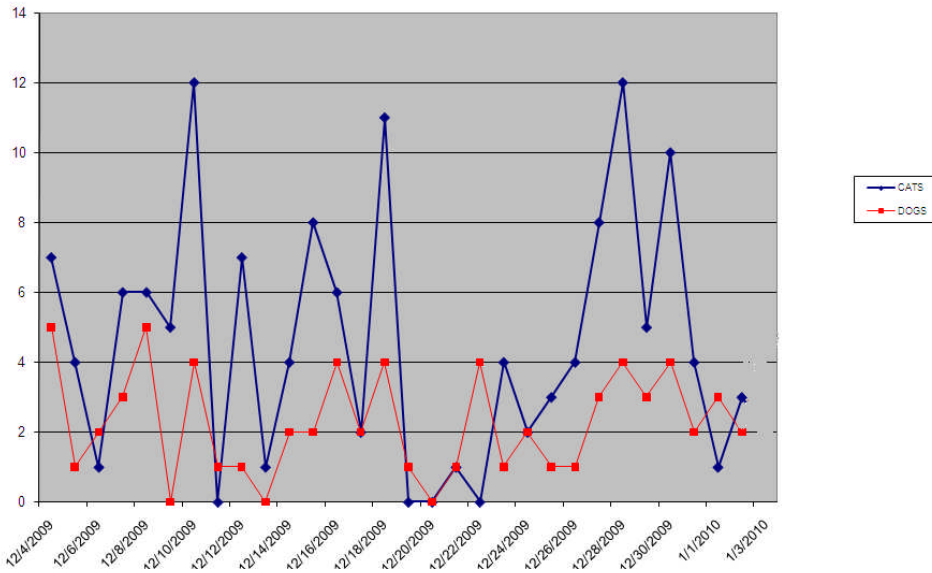
\* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



\* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

**BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT:** No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

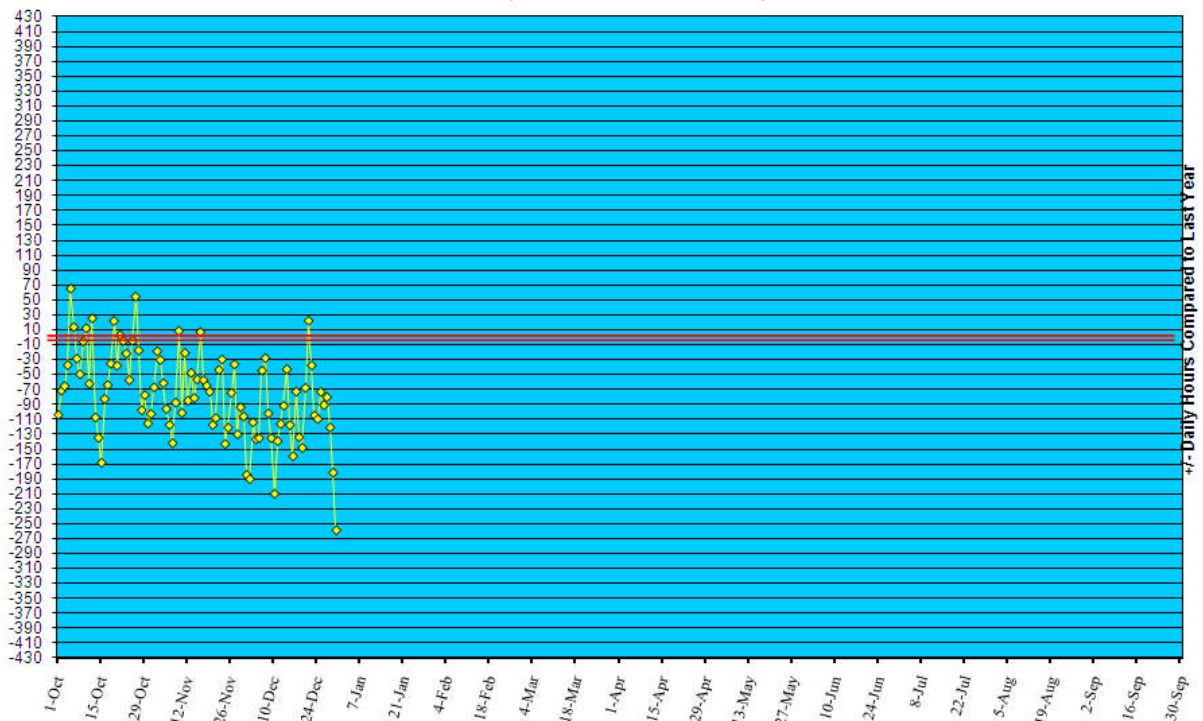
**Dead Animal Pick-Up Calls to 311**



**REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/09.

**Statewide Yellow Alert Comparison  
Daily Historical Deviations  
October 1, '09 to December 30, '09**



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in November 2009 did not identify any cases of possible public health threats.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

### **COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

<b>Meningitis:</b>	<b><u>Aseptic</u></b>	<b><u>Meningococcal</u></b>
New cases (Dec 27- Jan 02, 2010):	06	0
Prior week (Dec 20- Dec 26, 2009):	08	0
Week#52, 2008 (Dec 21- Dec 27, 2008):	07	0

**OUTBREAKS:** 2 outbreaks were reported to DHMH during MMWR Week 52 (December 27- January 2, 2009):

### **2 Gastroenteritis outbreaks**

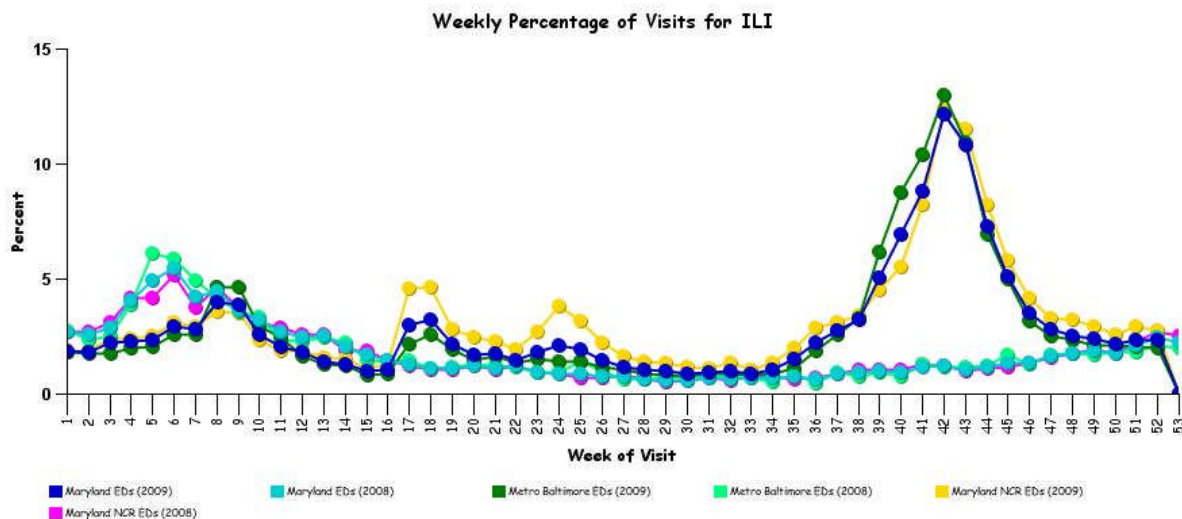
1 outbreak of GASTROENTERITIS in a Nursing Home  
1 outbreak of GASTROENTERITIS in a Hospital

**MARYLAND INFLUENZA STATUS:** Influenza activity in Maryland for Week 52 is SPORADIC.

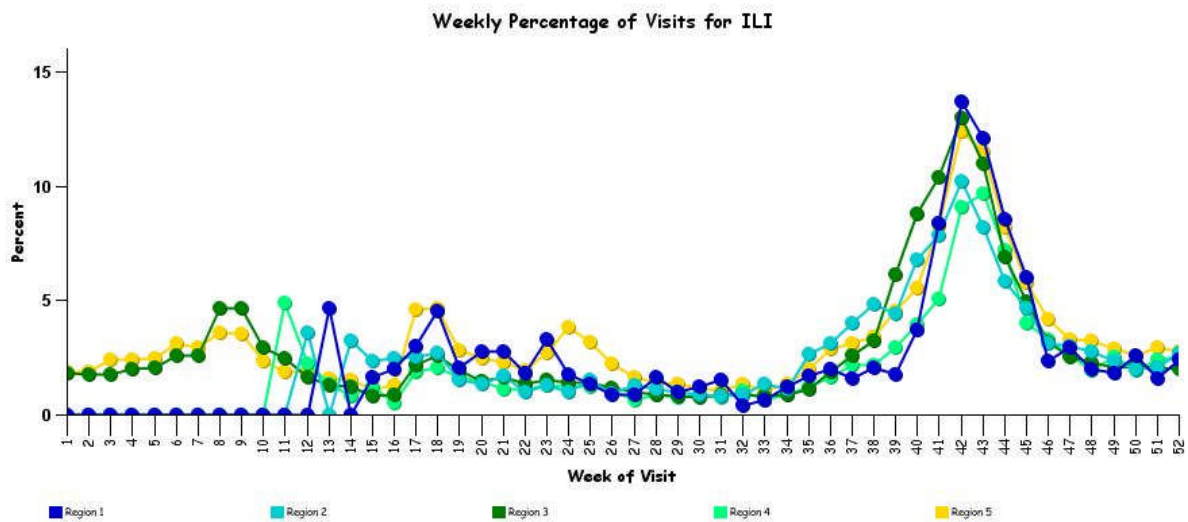
### **SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS**

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



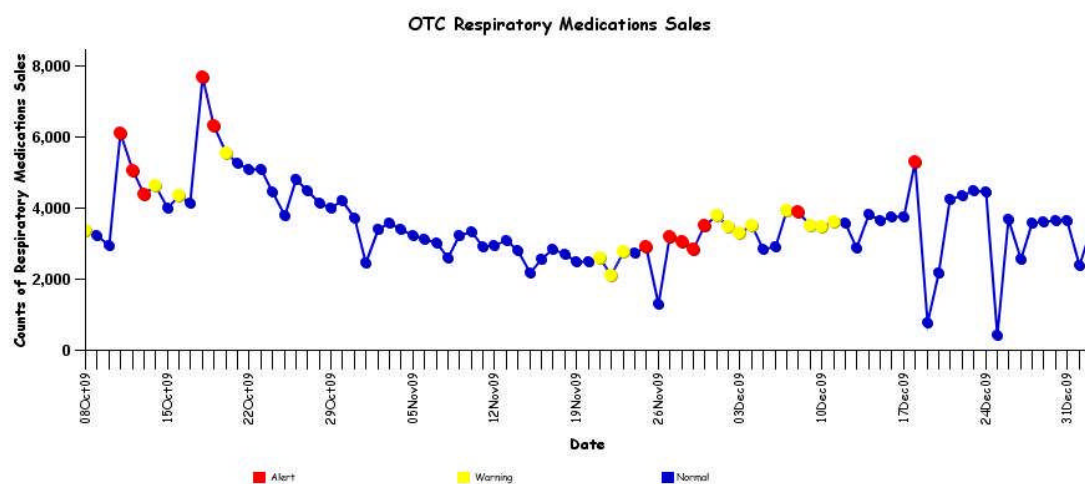
\* Includes 2008 and 2009 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



\*Includes 2009 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5  
 2009 data for these regions are depicted separately to establish baselines, due to the addition of new hospitals in these regions.

#### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.





## **PANDEMIC INFLUENZA UPDATE:**

**WHO Pandemic Influenza Phase:** Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

**US Pandemic Influenza Stage:** Stage 0: New domestic animal outbreak in at-risk country

**\*\*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:**  
[http://preparedness.dhmm.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex\(V7.2\).pdf](http://preparedness.dhmm.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex(V7.2).pdf)

## **AVIAN INFLUENZA-RELATED REPORTS:**

**WHO update:** As of December 30, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 467, of which 282 have been fatal. Thus, the case fatality rate for human H5N1 is about 60%.

## **H1N1 INFLUENZA (Swine Flu):**

**INFLUENZA PANDEMIC (H1N1) 2009, (CANADA):** 31 Dec 2009, A 27-year-old New Brunswick man is the 1st in the province to die after contracting an antiviral-resistant strain of H1N1 [presumably pandemic (H1N1) 2009 influenza virus infection], health officials in the province stated. The victim, a resident of Quispamsis, died at the Saint John Regional Hospital on Monday [28 Dec 2009]. His death is the 8th and youngest fatality associated with the [pandemic 2009] H1N1 virus in the province, said Dr. Paul Van Buynder, New Brunswick's deputy chief medical health officer. He was also the 1st person in the province to have an H1N1 virus resistant to Tamiflu [oseltamivir], the most common antiviral used to fight the infection, Van Buynder said. Drug-resistant cases of H1N1 are rare and have only occurred several dozen times across the world, Van Buynder said. The victim had a history of asthma and pneumonia but did not get the H1N1 vaccine, his parents say.

**INFLUENZA PANDEMIC (H1N1) 2009, (NORTH KOREA):** 31 Dec 2009, North Korea has sent out a nationwide alert in recent days about the apparent worsening spread of H1N1 flu [presumably pandemic (H1N1) 2009 influenza virus infection] according to an aid group with contacts in the country. The notice by the Seoul-based Buddhist aid group Good Friends follows the South Korean government's shipment of 400 000 doses of the flu treatment [drug] Tamiflu and 100 000 doses of Relenza to its impoverished neighbor on 18 Dec 2009 amid fears that a delayed response to the disease in the North could lead to serious consequences for the South. Good Friends said this week that North Korean officials had issued a statement that patients suffering from the disease should be given priority. The group said the statement was of a type issued only twice before, for seriously wounded soldiers during the 1950-1953 Korean War and for a deadly skirmish with South Korea in 2002. The true picture within highly restrictive North Korea is difficult to determine. Officials there couldn't be reached. On 9 Dec 2009, North Korea's official Korea Central News Agency confirmed that 9 people had contracted the virus, also known as swine flu [pandemic (H1N1) 2009 influenza virus infection], in the capital Pyongyang and in the city of Sinuiju. South Korean officials, who met with their North Korean counterparts during the flu-treatment shipments, said they were unclear on the situation. Lee Jong-joo, a deputy spokeswoman for South Korea's Unification Ministry, which handles relations with the North, said that the fact that North Korea officially disclosed it is fighting the virus suggests it could be serious. "North Korean officials we met at that time said the country is setting up a tight disease-control system and getting itself ready for an outbreak in the country," she said on Wednesday [30 Dec 2009]. North Korean officials were "very grateful" for the South's donated treatments, said Kim Young-il, a manager at the ministry's humanitarian aid team. South Korea's aid to the North has dwindled since President Lee Myung-bak took office in 2008. Mr. Lee tied aid to progress in talks to halt North Korea's pursuit of nuclear weapons. Talks have been slowed by Pyongyang's delaying tactics. Amid recent peace overtures by the North, the South Korean government said Monday [28 Dec 2009] it would provide North Korea with USD 22 million in general humanitarian aid. "Medication shipment alone is not enough. Since the infection is closely related to nutrition, the Seoul government should allow civil groups to resume their private aid works to efficiently fight against the disease," said Lee Woo-young, a professor at the University of North Korean Studies. According to the World Health Organization, pandemic H1N1 has caused at least 11 500 deaths worldwide. But activity has been declining in much of the world, including East Asia, it said.

**INFLUENZA PANDEMIC (H1N1) 2009, WORLD HEALTH ORGANIZATION UPDATE:** As of 27 Dec 2009, worldwide more than 208 countries and overseas territories or communities have reported laboratory confirmed cases of pandemic influenza H1N1 2009, including at least 12 220 deaths. WHO is actively monitoring the progress of the pandemic through frequent consultations with the WHO Regional Offices and member states and through monitoring of multiple sources of data.

The most active areas of pandemic influenza transmission currently are in central and eastern Europe. Focal increases in rates of ILI/ARI [influenza-like illness/acute respiratory tract infection] during recent weeks were reported in at least 3 eastern European countries, Georgia, Montenegro, and Ukraine. A high intensity of respiratory diseases activity with concurrent circulation of pandemic influenza persists in parts of southern and eastern Europe, particularly in Greece, Poland, Bulgaria, Serbia, Ukraine, and

the Urals Region of the Russian Federation. In Western Europe, influenza transmission remains active and widespread, but overall disease activity has peaked. At least 13 of 21 countries (testing more than 20 sentinel samples) reported that 30 percent or more of sentinel specimens were positive for influenza, down from a peak of over 70 percent. All influenza viruses detected in Western Europe were pandemic H1N1 2009, however, very small numbers of seasonal influenza viruses, making up less than one percent of all influenza viruses detected, were reported in Russia. In addition, limited available data indicates that active, high intensity transmission is occurring in Northern African countries along the Mediterranean coast (Algeria, Tunisia, and Egypt). In Central Asia, limited data suggest that influenza virus circulation remains active, but transmission may have recently peaked in some places. In West Asia, Israel, Iran, Iraq, Oman, and Afghanistan also appear to have passed their peak period of transmission within the past month, though both areas [Central and West Asia] continue to have some active transmission, and levels of respiratory disease activity have not yet returned to baseline levels. In East Asia, influenza transmission remains active but appears to be declining overall. Influenza/ILI activity continued to decline in Japan, in northern and southern China, Chinese Taipei, and Hong Kong SAR (China). Slight increases in ILI were reported in Mongolia after weeks of declining activity following a large peak of activity over one month ago. In Southern Asia, influenza activity continues to be intense, particularly in northern India, Nepal, and, Sri Lanka. Seasonal influenza A (H3N2) viruses are still being detected in very small numbers in China making up about 2.5 percent of the influenza A viruses detected there. In North America, influenza transmission remains widespread but has declined substantially in all countries. In the US, sentinel outpatient ILI activity has returned to the seasonal baseline, and indicators of severity, including hospitalizations, paediatric mortality, and P&I mortality have declined substantially since peaking during late October 2009. Rates of hospitalization among cases aged 5-17 years and 18-49 years far exceeded rates observed during recent influenza seasons, while rates of hospitalizations among cases aged over 65 years were far lower than those observed during recent influenza seasons. In the tropical regions of Central and South America and the Caribbean, influenza transmission remains geographically widespread, but overall disease activity has been declining or remains unchanged in most parts, except for focal increases in respiratory disease activity in a few countries. In the temperate regions of the southern hemisphere, sporadic cases of pandemic influenza continued to be reported without evidence of sustained community transmission.

#### **Resources:**

<http://www.cdc.gov/h1n1flu/>

<http://www.dhmv.maryland.gov/swineflu/>

#### **NATIONAL DISEASE REPORTS**

**ANTHRAX, HUMAN (NEW HAMPSHIRE):** 02 Jan 2010, The strain of anthrax found on a Strafford County woman has been determined to be the same as the one found on 2 drums used during a drum circle the woman attended, state public health officials said yesterday. DNA tests returned yesterday [31 Dec 2009] from the federal Centers for Disease Control and Prevention show 4 samples of anthrax taken from the United Campus Ministry's Waysmeet Center in Durham are all the same. One was found on an electrical outlet, 2 were found in drums used during the [4 Dec 2009] drumming circle, and the last was taken from the woman's body. The woman, whose name has not been released, was stricken with gastrointestinal anthrax after taking part in the drumming circle, according to Dr Elizabeth Talbot, an adviser to the state's public health division. Authorities are still unsure if the woman. She remains in critical condition in a Massachusetts hospital. Talbot said of the 66 drums at the circle, about 56 have been tested. She urged the remaining drum owners to contact the authorities to arrange testing. She said investigators thought from the start the woman contracted anthrax contained within a drum, possibly when spores were suspended in the air through repeated banging. While yesterday's [31 Dec 2009] tests confirmed part of their hypothesis, one question still remains: Where did the anthrax come from? "Our priority to date clearly has been protecting the public and making sure there are no additional exposures," Talbot said. Investigators are working to track down historical information about the anthrax strain. "It does attest to how rare it is," Talbot said. Talbot said the public is not in danger. Anthrax cannot be spread between people. Health officials are offering vaccines to dozens of other people who passed through the campus ministry center, but none appears ill. About half have already been contacted to discuss taking vaccines. The remaining participants are being asked to call the state Department of Health and Human Services. Vaccines consist of 3 injections over a 2-week period. "It is a personal choice made on a case-by-case basis made with consultation with the patient and their doctor," Talbot said. Meanwhile, the Waysmeet Center is still under quarantine as federal and state health agents determine the best way to clean the area. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

**E. COLI O157 -TENDERIZED, NON-INTACT STEAK (USA):** 30 Dec 2009, A beef recall is under way in a half-dozen states involving possibly contaminated products from the Oklahoma company National Steak and Poultry, according to the firm and federal inspectors. The USA Agriculture Department officials said a cluster of illnesses involving the \_E. coli\_ [O157:H7] bacterium was reported in Colorado, Iowa, Kansas, Michigan, South Dakota and Washington state. The cases then were linked with beef the Owasso, Oklahoma, company produced in October, prompting the government to direct a Class I recall, indicating the highest risk of illness if the products are consumed. On Thursday [24 Dec 2009], National Steak and Poultry began a voluntary recall of 248 000 pounds of beef products marketed under its name as well as under names that include Carino's Boneless Beef and Moe's Beef Steak. A consumer hotline at the company carries a recorded message noting "this is the 1st recall in our company's nearly 30-year history." National Steak and Poultry did not acknowledge any contamination in its beef processing or packaging facilities, but the recording said the firm "will err on the side of being cautious" with the recall. (Food Safety Threats is listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case



## **INTERNATIONAL DISEASE REPORTS**

**CHIKUNGUNYA (INDONESIA):** 01 Jan 2010, Over 12 000 people in Lampung [province, Indonesia] have reportedly contracted the mosquito-borne chikungunya disease [virus] since mid December [2009], the highest recorded number in the last 10 years, says the provincial Health Agency. Although the disease is not deadly, many victims have been forced to stay in bed for a week due to joint pains they said made them feel like they were paralyzed. "I had to drop my New Year celebration plans thanks to the illness," said a man, 46, of West Tanjungkarang, Bandar Lampung, on Wednesday [29 Dec 2009]. He said that he and his children had gone to a local community health center (Puskesmas [auxiliary health centers]) to seek medical treatment, but were still yet to recover from the disease. Most of the chikungunya sufferers in the province are being treated at home or at the nearest Puskesmas. So far, Tulangbawang and Mesuji have been reported as the worst hit regencies in the province, where the disease has affected between 3000 and 4000 people in both regions consecutively. Mesuji is a former transmigration area and the majority of its population comes from Java and Bali, where numerous swamps are left abandoned. "None of the sufferers in Mesuji are receiving medical treatment at hospital. Most of them don't consider the disease deadly although it tortures them with pain and decreases their ability to work," said the head of the regency health agency, Anindito. He added that most of the sufferers had complained of joint and bone pains. Yet, he assured the disease would not paralyze them. "They will recover by themselves in 5-7 days," Anindito said. Meanwhile in West Lampung, the regency health agency reported that 930 people were suffering from chikungunya [virus disease], most of whom lived near or inside the forest. They are spread across 10 subdistricts in the Bengkuntat-Belimbing district, with Penyandingan the worst hit subdistrict. The chikungunya virus is contracted through the bite of the *Aedes aegypti* mosquito. Once infected, victims develop a high fever, reddish spots, joint pains, vomiting, flu symptoms, and headaches. Some call the disease the bone flu in reference to its specific symptoms. Head of the Lampung Health Agency Reliyani said her office was inventing [estimating?] the number of sufferers across the province and would use the data to help rid the province of the disease. "Fogging is not the best answer to dealing with the disease. A healthy lifestyle and 3M plus practices [drain, bury, cover to eliminate *Aedes* mosquito breeding sites for these vectors of the virus] are a better alternative," said Reliyani, referring to the abbreviated term of periodically cleaning water containers as a preventive measure. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) \*Non-suspect case

**ANTHRAX, HUMAN (UNITED KINGDOM):** 01 Jan 2010, A further male heroin injector has tested positive for anthrax. The patient is responding well to treatment at Monklands District General Hospital in Lanarkshire. This takes the total number of confirmed anthrax-linked cases to 6, which includes the 3 individuals who have died. The other 2 surviving confirmed patients continue to respond well to treatment -- a male at Glasgow's Victoria Infirmary and a male at Monklands District General Hospital in Lanarkshire. A 7th patient, a female, who is being treated at the Southern General, is being tested and we await the results. NHS Greater Glasgow and Clyde's Public Health Protection Unit are continuing to work closely with NHS Lanarkshire, the procurator fiscal's office and Strathclyde Police to identify the source of the anthrax. One avenue, which continues to be investigated by Public Health and Strathclyde Police is that contaminated heroin or a contaminated cutting agent mixed with the heroin may be responsible for the infections. Dr Syed Ahmed, consultant in Public Health Medicine, said: "Drug injecting is extremely risky and dangerous. The possible presence of a batch of heroin contaminated with anthrax makes drug injecting even riskier and even more dangerous. I urge all drug injecting heroin users to be extremely alert and to seek urgent medical advice if they experienced an infection. While this section of the community needs to be on their guard the risk to the rest of the population -- including close family members of the infected cases -- is negligible. It is extremely rare for anthrax to be spread from person to person and there is no significant risk of airborne transmission from one person to another." As part of ongoing inquiries any drug injecting heroin user who presents with serious soft tissue infections now or during the last 4 weeks is being investigated. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

**ANTHRAX, HUMAN, BOVINE (ZIMBABWE):** 29 Dec 2009, Anthrax is feared to be spreading in Zimbabwe as veterinary officials said on Monday [28 Dec 2009] they are testing a suspected case of the deadly disease from a rural growth point about 50 kilometers [about 30 miles] East of Harare. The suspected case followed an outbreak of the disease in central parts of the country last week, which killed one person and 25 cattle. Veterinary Services Department deputy director Chenjerai Njagu told Xinhua on Monday that the results of the suspected case from Juru Growth Point in Goromonzi district would be out on Tuesday. He said the area is one of the few districts which were left out during vaccination done at the beginning of the year. "We left out Goromonzi and Seke districts because of shortage of vaccines," said Njagu. "Now these are the areas giving us problems because we had not vaccinated them at the beginning of the year." The anthrax outbreak in Seke, some 40 km [25 miles] South-East of Harare, killed 18 cattle while one person and 7 cattle succumbed to the disease which broke out last week in Selous, 60 km [37 miles] North-West of the capital. Njagu said the disease was dangerous as one case can kill several people who consume meat from an infected animal. He said the department would soon move into the affected areas to vaccinate cattle. The department vaccinated 1100 cattle in Seke over the Christmas holiday but Njagu said the turnout was very low. "The turnout was low and we are going to repeat vaccination after the holiday," he said. Anthrax is a soil-borne disease which is endemic in Zimbabwe. It is normally recorded during the rainy season when sprouting grass brings out the bacteria from soil. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmd.state.md.us/>

Maryland's Resident Influenza Tracking System: [www.tinyurl.com/flu-enroll](http://www.tinyurl.com/flu-enroll)

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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